

AMENDMENTS TO THE CLAIMS

1 - 11. (Cancelled).

12. (Currently Amended) A drive for cooling fans in motor vehicles, the drive comprising:

a primary cooler (4) located in a primary cooling circuit (3),

a primary temperature sensor (23),

at least two secondary coolers (7, 8) located in respective secondary cooling circuits (5, 6),

a fluid friction clutch including driving and driven clutch members (9, 10), and

a reservoir (17) for a viscous fluid, the reservoir (17) being limited by a separating member (18) and being connectable to a working chamber (19) by at least one first opening (20) in the separating member (18), the working chamber (19) extending into a region between the clutch members (9, 10) in which torque is transmitted from the driving clutch member (9) to the driven clutch member (10) by the viscous fluid, and wherein filling of the working chamber (19) with the viscous fluid is controlled by a first control element (21) opening and closing the first opening (20) in the separating member (18) depending on the temperature of cooling air passing through the primary cooler (4) sensed by the primary temperature sensor (23),

characterized in that each of the at least two secondary cooling circuits (5, 6) includes a secondary temperature sensor (40, 41), the secondary temperature sensors (40, 41) being operatively connected to a control unit (38, 39) arranged to control a second control element (31), wherein the separating member (18) comprises at least one second opening (30), the second control element (31) being arranged in the working chamber (19), the control unit (39) moving the second control element (31) to press against the separating member wall against the bias of a spring member to close the at least one second opening (30) in accordance with a sensed temperature detected by one or more of the secondary temperature sensors (40, 41) and moving the second control element away from the separating member to open the at least one second opening in accordance with the sensed temperature rising above a predetermined value

to control the filling of the working chamber (19) with the viscous fluid, and wherein control of the second control element (31) is independent of control of the first control element (21).

13. (Previously Presented) A drive according to Claim 12 wherein the first and second control elements (21, 31) are arranged on opposite sides of the separating member (18).

14. (Previously Presented) A drive according to Claim 12 wherein the second control element (31) moves axially towards and away from the separating member (18) to respectively close and open the at least one second opening (30) .

15. (Previously Presented) A drive according to Claim 14 wherein the degree of movement of the second control element (31) is proportional to the temperature sensed by the secondary temperature sensors (40, 41).

16. (Previously Presented) A drive according to Claim 12 wherein the second control element (31) is connected to the control unit by an actuation member (33, 57).

17. (Previously Presented) A drive according to Claim 16 wherein the actuation member (33, 57) extends through a concentric bore of a drive shaft (11), and the control unit engages the actuation member (33, 57) extending from the drive shaft (11).

18 - 20. (Canceled).

21. (Previously Presented) A drive according to Claim 12 wherein the control unit includes a magnet (38).

22. (Previously Presented) A drive according to Claim 21 wherein the control unit also includes an electronic circuit, the magnet (38) being controlled by the electronic circuit (39), the secondary temperature sensors (40, 41) forming part of the electronic circuit, and wherein the magnet (38) is moved to open the at least one second opening (30) if either one of the secondary temperature sensors (40, 41) detects said sensed temperature rising above the predetermined value.

23. (Currently Amended) A drive for cooling fans in motor vehicles, the drive comprising:

- a primary cooler (4) located in a primary cooling circuit (3),
- a primary temperature sensor (23),
- a secondary cooler (7) located in a secondary cooling circuit (5),
- a fluid friction clutch including driving and driven clutch members (9, 10), and
- a reservoir (17) for a viscous fluid, the reservoir (17) being limited by a separating member (18) and being connectable to a working chamber (19) by at least one first opening (20) in the separating member (18), the working chamber (19) extending into a region between the clutch members (9, 10) in which torque is transmitted from the driving clutch member (9) to the driven clutch member (10) by the viscous fluid, and wherein filling of the working chamber (19) with the viscous fluid is controlled by a first control element (21) opening and closing the first opening (20) in the separating member (18) depending on the temperature of cooling air passing through the primary cooler (4) sensed by the primary temperature sensor (23),

characterized in that the secondary cooling circuit (5) includes a secondary temperature sensor (40), the secondary temperature sensor (40) being operatively connected to a control unit (38, 39, 51) arranged to control a second control element (31), wherein the separating member (18) comprises at least one second opening (30), the second control element (31) being arranged in the working chamber (19), the control unit (38, 39, 51) moving the second control element (31) to press against the separating member wall against the bias of a spring member to close the at least one second opening (30) in accordance with a sensed temperature detected by ~~one or more~~

of the secondary temperature sensor ~~sensors~~ (40, ~~41~~) and moving the second control element away from the separating member to open the at least one second opening in accordance with the sensed temperature rising above a predetermined value to control the filling of the working chamber (19) with the viscous fluid, and wherein control of the second control element (31) is independent of control of the first control element (21).

24. (Previously Presented) A drive according to Claim 23 wherein the first and second control elements (21, 31) are arranged on opposite sides of the separating member (18).

25. (Previously Presented) A drive according to Claim 23 wherein the second control element (31) moves axially towards and away from the separating member (18) to respectively close and open the at least one second opening (30) .

26. (Previously Presented) A drive according to Claim 25 wherein the degree of movement of the second control element (31) is proportional to the temperature sensed by the secondary temperature sensor (40).

27. (Previously Presented) A drive according to Claim 23 wherein the second control element (31) is connected to the control unit by an actuation member (33, 57).

28. (Previously Presented) A drive according to Claim 27 wherein the actuation member (33, 57) extends through a concentric bore of a drive shaft (11), and the control unit engages the actuation member (33, 57) extending from the drive shaft (11).

29. (Currently Amended) A drive according to Claim 28 wherein the control unit (51) is rotatably arranged in a chamber (48) of a drum (43) driving the drive shaft (11), and a working fluid flows through the chamber (48) of the drum (43).

30. (Currently Amended) A drive according to Claim 29 wherein the control unit (51) is rotatably supported in the drum (43) by a roller bearing (52).

31. (Currently Amended) A drive according to Claim 27 wherein the control unit (51) includes a piston and cylinder actuator, the piston being connected to the actuation member (57), and wherein the piston includes first and second surfaces, the first surface being subjected to a force of a biasing element (60), and the second surface being subjected to a force generated by an element (59) which expands with rising temperatures to open the at least one second opening (30).

32. (Previously Presented) A drive according to Claim 23 wherein the control unit includes a magnet (38).

33. (Previously Presented) A drive according to Claim 32 wherein the control unit also includes an electronic circuit, the magnet (38) being controlled by the electronic circuit (39), the secondary temperature sensor (40) forming part of the electronic circuit, and wherein the magnet (38) is moved to open the at least one second opening (30) if either one of the secondary temperature sensor (40) detects said sensed temperature rising above the predetermined value.